DGRV
NATIONAL OFFICE FOR ENERGY COOPERATIVES

ENCREMENCO

ENhancing the Capacity of REgions and Municipalities to participate in Energy COmmunities (ENCREMENCO)

REPORT ON GOOD PRACTICES OF GERMAN ENERGY COOPERATIVES

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1. Introduction

The introduction of the Law 4513/2018 on energy communities is considered as an important policy instrument to the achievement of the Greek national climate targets and the fulfilment of the country's respective climate obligations at EU and international level. Municipalities are expected to play a vital role in the effective implementation of the new Law, however they are currently not informed on its processes, associated opportunities and the benefits brought about by the development of energy communities to the municipalities and their citizens. On top of that, the law mandates that interested actors choose cooperatives as their legal entity. However, in Greece operating energy cooperatives are currently not a common sight and so the level of experience is relatively low.

In Germany, around 183,000 people are involved in a total of 858 energy cooperatives, thus participating actively in the energy transition of the country. Although most energy cooperatives are not much older than ten years, in many places they are important promoters of the decentralized energy transition. The involvement and diversity of actors is considered to be an essential factor for their success here, by bringing stakeholders like local authorities of the town and local businesses together. By pulling in the same direction, all involved parties reach a common goal: to enhance the overall local environment.

The National Office for Energy Cooperatives is a sector-specific unit within the DGRV that accompanied and supported this development from the very start, accumulating know-how and profound knowledge about the German energy cooperative in the process. With the active membership in REScoop.eu, the European federation for renewable energy cooperatives, DGRV also has insights into international best practices.

Based on collected data and an analysis of the key elements for Greek communities, the goal of this report is to present a selection of good practices of German energy cooperatives while highlighting two variables: involvement of local stakeholders and application of technology / business models.

2. The good practices collection in Germany

For the selection of appropriate national good practices for energy cooperatives, CRES and DGRV determined a set of criteria that will be presented in the following chapter, before presenting individual chosen examples in more detail.

2.1.Criteria for good practice selection in Germany

This chapter should give the reader a short presentation of the criteria that were used in selecting appropriate best practices by explaining and highlighting its respective relevance for the Greek case. [1]

[1]Please note that climate protection and preservations of natural resources is a key driver for all considered energy cooperatives which is why it's not mentioned individually.

Involvement of local stakeholders

Involvement of municipalities and municipal actors like politicians and local companies can have a significant impact on the positive outcome of energy cooperatives in Greece.

One main reason is the *regional value creation*. Energy cooperatives have a clear concern for the community they operate in. They usually share a part of the profits with their members and use the residual to develop new projects or activities that benefit the local community as a whole. Examples, like the energy cooperative Odenwald or Saerbeck, show how the promotion of inter-municipal cooperation, regional added value and the structural development of the region in ecological, economic and social balance is achieved.

Another important factor is the *acceptance* of renewable energies in Greece, especially for wind turbines. Local opposition to renewable energy projects decreases when citizens are given the opportunity to invest in and co-own the production installations in their neighbourhood. This is especially true when local citizens are involved from the very start of the project, highlighting the importance of transparency and engagement. Stakeholder involvement and direct citizen participation thus foster social acceptance of renewable energy.

The third main reason is the participation of a broad scope of citizens, one that is independent from demographic variables but rather focuses on a geographic premise. This becomes relevant in areas where not everyone has a roof suitable for solar panels, or the financial capacity to make such a considerable investment by themselves.

Proficiency in applying technology

The idea behind this criterion was to ensure a broad coverage of all technologies of RES that are successfully implemented in German energy cooperatives, ranging from highly relevant cases related to solar and wind application to cases with marginal relevancy, like district heating. Furthermore, when it comes to its mere technical implementation, it is important to get insight on how certain technologies are best implemented, especially in terms of the underlying business model.

Hence, for the selection of best practices, DGRV included the following technologies and/or sectors:

- Solar Power and PV
- Wind Power and Wind Turbines
- Biogas-Power and Biomass
- Energy Commercialization
- Energy Distribution

Please note that this list of criteria is intended to be **illustrative and not limiting**.

2.2.Overview of good practices collection in Germany

Based on the presented criteria, DGRV selected adequate examples within the German sector for energy cooperatives.

Reference	Best Practices (official name in German with English translation)	Relevant Experiences
2.2.1	**Alb-Elektrizitätswerk Geislingen-Steige eG**[2] **(Alb-Power Station Geislingen-Steige eG)**	Operation of local grid / Coverage of a broad spectrum for services
2.2.2	**BürgerEnergieGenossenschaft-58 (BEG-58)** **CitizenEnergyCooperative-58 (BEG-58)**	Solar power / Regional value creation / Social acceptance
2.2.3	***Bürgerenergiegenossenschaft BENG eG*** ***Citizen energy cooperative BENG eG***	Solar power / tenant model / lobbyism
2.2.4	***Bürgerenergie Unterhaching eG*** ***Citizen energy Unterhaching eG***	Solar power / Cooperation with local authorities
2.2.5	**BürgerEnergieRheinMain eG** **CitizenEnergyRheinMain eG**	Successful business model for FIT / Contracting
2.2.6	**Bürgerwerke eG** **Citizen factory eG**	Intercooperative collaboration / How-to: Commercialization
2.2.7	**Energie für Saerbeck eG** **Energy for Saerbeck eG**	Involvement of local stakeholders / Bioenergy-village / Education
2.2.8	**Energiegenossenschaft Odenwald eG** **Energy cooperative Odenwald eG**	Involvement of different actors within a region / Regional value creation
2.2.9	**Fünfseenland eG** **Fünfseenland eG (refers to a specific region)**	Diversification of different sectors / (Energy) Education for citizens
2.2.10	**Haltern am See eG** **Haltern am See eG**	Involvement of local stakeholders / regional value creation

[2] Officially registered cooperative society

2.2.11	**Heidelberger Energiegenossenschaft eG** **Heidelberger energy cooperative eG**	Involvement of local stakeholders, especially the younger generation
2.2.12	**Solargenossenschaft Essen eG** **Solar cooperative Essen eG**	Transition from fossil sources to RES
2.2.13	**Starkenburg eG** **Starkenburg eG**	Social acceptance through ownership / Biogas plant and impact for region
2.2.14	**WeilerWärme eG** **WeilerHeating eG**	Municipality involvement from the very beginning / How-to: Expansion into different sectors / Regional value creation
2.2.15	**Ökumenische Energiegenossenschaft eG** **Ecumenical energy cooperative eG**	Influence of religious institutions

2.2.1 Alb-Elektrizitätswerk Geislingen-Steige eG

The **Alb-Elektrizitätswerk Geislingen-Steige eG** has a history of more than 100 years. As an energy supplier, the cooperative is operating the local grid and maintains a close coordination with the respective communities and local authorities at the same time. In addition to supplying electricity, operating networks, and selling electricity, the cooperative is active as an electrical and communications technology service provider, while also retailing electrical equipment. The members are made up of personalities from the public life of the region, in particular mayors. Albwerke is committed to social activities that improve the quality of life within the municipality they work in, e.g. by improving the infrastructure for sports and culture.

The example shows how energy supply can be operated by one local actor successfully over many years, boosting regional value creation, social acceptance and independence from third parties.

Name	*Alb-Elektrizitätswerk Geislingen-Steige eG*
Location	*Geislingen/ Baden-Württemberg*
Contact details	*Alb-Elektrizitätswerk Geislingen-Steige eG* *Eybstraße 98-102 1* *73312 Geislingen* info@albwerk.de
webpage	*https://www.albwerk.de/home*

Members	*1452*
Membership Structure	*private individuals* companies/banks *local authorities*
Total investments	*19,542 thousand € (in 2018 alone)*
Sector	*energy production from PV* *energy production from wind energy* *energy production from biogas* *delivery of electricity & natural gas* *energy production from other sources (hydro, CHP)* *water supply management* *consulting* *e-mobility* *electrical and communication technology (via service provision and physical shops)*
Business model	*Feed-in tariff* *Direct selling* *Contracting* *Grid operator*
Minimum participation	*500 €*

2.2.2 BürgerEnergieGenossenschaft-58 (BEG-58)

Since 2010 the **BürgerEnergieGenossenschaft-58 (BEG-58)** has been writing a success story with the construction and operation of solar power systems (photovoltaic systems) on regional roofs. The cooperative carefully selects appropriate roofs within the municipality by applying contracts for roof usage. The cooperative maintains a close network with regional actors and prioritizes local business partners, even cooperating with a local energy supplier to commercialize its energy. Another interesting fact is that the cooperative offers bulk orders for balcony PV-modules.

The example shows how a self-sufficient energy supply can be achieved with solar power, boosting regional value creation and social acceptance, while being independent from third parties at the same time.

Name	*Bürger-Energie-Genossenschaft (BEG-58)*
Location	*Wetter (Ruhr) / North Rhine-Westphalia*

Contact details	*BürgerEnergieGenossenschaft eG* *Gustav-Vorsteher-Str. 20* *58300 Wetter (Ruhr)* rolf.weber@beg-58.de
webpage	*https://www.beg-58.de/*
Members	*374*
Membership Structure	*private individuals* companies/banks local authorities
Total investments	*4,700,000 €*
Sector	*energy production from PV* *delivery of electricity* *consulting* *education*
Business model	*Feed-in tariff* *Direct selling* *Group purchases*
Minimum participation	*1,000 €*

2.2.3 Bürgerenergiegenossenschaft BENG eG

Before the ***Bürgerenergiegenossenschaft BENG eG*** was officially founded as cooperative in 2011, most of the initial members had already participated in the German energy transition beforehand, e.g. by collaborating with local organizations and authorities. From the first moment on, the focus of the cooperative has been PV and solar power generation. With the new EEG[3] coming into effect in 2017, the cooperative has been exploring the option of tenant models for housing projects within municipalities. To streamline the commercialization of the produced electricity, the cooperative participates in bavariastrom[4].

The example shows how a self-sufficient energy supply can be achieved with solar power, highlighting that citizen participation in the energy sector can be achieved independently from private property.

Name	*Bürgerenergiegenossenschaft BENG eG*

[3] The **Renewable Energy Sources Act** or **EEG** (German: *Erneuerbare-Energien-Gesetz*) is a series of German laws that regulates and promotes the production and integration of RES within the national energy sector.
[4]The Landesnetzwerk Bürgerenergie Bayern e.V. (BEBay), in cooperation with GRÜNSTROMWERK, offers bavariastrom, a regional electricity product, throughout Bavaria, which is completely produced by eco-power plants in Bavaria. The regional citizen energy cooperatives are as exclusive partners involved in electricity sales via a commission model as a mean to commercialize their own generated power from RES.

Location	*München / Bavaria*
Contact details	*Bürgerenergiegenossenschaft BENG eG* *Stiftsbogen 148* *81375 München* kontakt@beng-eg.de
webpage	*https://www.beng-eg.de/*
Members	*290*
Membership Structure	private individuals companies/banks local authorities/public institutions/churches
Total investments	*2,9 Mio. €*
Sector	*energy production from PV* *delivery of electricity* *consulting*
Business model	*Feed-in tariff* *Tenant model* *Direct selling*
Minimum participation	*511 €*

2.2.4 Bürgerenergie Unterhaching eG

In 2011, the municipality Unterhaching (close to Munich) organized a workshop for citizens interested in energy self-sufficiency and climate protection. As a result of the event, present citizens agreed to form the energy cooperative ***Bürgerenergie Unterhaching eG*** as an appropriate mean to achieve the common goals, including the municipality as a founding member. Since then, the cooperative has been mainly involved in PV-projects, focusing its efforts on the municipality of Unterhaching. By maintaining a strong relationship with local authorities, the cooperative hopes to design a vast PV-infrastructure, focusing on roof projects, tenant models and open space solutions. Another sign of local involvement is the fact that the mayor of Unterhaching is not only member of the cooperative but also of the board of director.

The example shows how a self-sufficient energy supply can be achieved with solar power. The energy cooperative Bürgerenergie Unterhaching eG is a good example on how even little efforts, such as the right nudges from local authorities, can go a long way.

Name	*Bürgerenergie Unterhaching eG*

Location	*Unterhaching / Hessia*
Contact details	*Bürger-Energie-Unterhaching eG* *Bahnhofsweg 8* *82008 Unterhaching* info@beu-unterhaching.de
webpage	*https://beu-unterhaching.de/*
Members	*550*
Membership Structure	*private individuals* *companies/banks* *local communities /authorities*
Total investments	1.700.000 €
Sector	*energy production from PV* *delivery of electricity* *energy production from wind energy* *consulting* *energy production from other sources (hydro)* *e-mobility* *energy saving*
Business model	*Feed-in tariff* *Direct selling* *Carsharing*
Minimum participation	*500 €*

2.2.5 BürgerEnergieRheinMain eG

The **BürgerEnergieRheinMain eG** originated from an initial workshop within the municipality. Three months later, the cooperative was officially registered, with 27 signing members including the local mayor of Mörfelden-Walldorf. Having started with a strong focus on gathering electricity from solar power, the BürgerEnergieRheinMain eG has since expanded to combined heat, power plants (CHP) and local district heating. Next to commercializing electricity, the cooperative also offers Biogas through the Buergerwerke eG and participates in a public project related to e-mobility.

The example offers an interesting case on how a cooperative can run "typical" community energy PV plants based on the feed-in tariff system. They also provide some innovative services like e-carsharing and contracting (energy efficiency projects with the community) solutions.

Name	*BürgerEnergieRheinMain eG*
Location	*Mörfelden-Walldorf / Hessia*
Contact details	*BürgerEnergieRheinMain eG* *Menzelstraße 9b* *64546 Mörfelden-Walldorf* kontakt@bermeg.de
webpage	*https://www.bermeg.de/*
Members	*300*
Membership Structure	*private individuals* *local authorities/public institutions*
Total investments	*2.000.000 €*
Sector	*energy production from PV* *delivery of electricity* *energy production from wind energy* *consulting* *energy production from other sources (hydro, CHP)* *e-mobility*
Business model	*Feed-in tariff* *Tenant model* *Direct selling* *Carsharing* *Contracting*
Minimum participation	*400 €*

2.2.6 Bürgerwerke eG

In December 2013, 9 energy cooperatives joined forces to found the **Bürgerwerke eG** in Heidelberg with the goal of jointly selling green electricity. One of the goals of the Bürgerwerke is that energy cooperatives can commercialize locally generated electricity and green gas in their respective region by referring to one product and distributing incurring costs among many participants. Today, the cooperative *is an umbrella organization for more than 90 energy cooperatives, enabling small and bigger energy cooperatives to offer electricity and gas products.*

The example shows how energy cooperatives can work together in order to become more competitive. It also showcases how energy powered by citizens can be commercialized in an attractive way.

Name	*Bürgerwerke eG*
Location	*Heidelberg / Baden-Württemberg*
Contact details	*Bürgerwerke eG* *Hans-Bunte-Straße 8-10* *69123 Heidelberg* *info@buergerwerke.de*
webpage	*https://www.buergerwerke.de*
Members	*96*
Membership Structure	*German energy cooperatives*
Total investments	*NA*
Sector	*energy production from hydropower* *delivery of electricity and natural gas* *consulting*
Business model	*Direct selling*
Minimum participation	*1.000 €*

2.2.7 Energie für Saerbeck eG

The history of citizen participation in **Saerbeck** dates back to 2008, when the municipality, after very positive experiences with results of a citizens driven initiative to install photovoltaic (PV) panels on the roofs of municipal buildings, adopted a solution to switch the energy supply of the whole municipality to renewable energy sources. The energy cooperative **Energie für Saerbeck eG** was initiated only one year later, with the local cooperative bank leading the way. In years to come, Saerbeck achieved the successful association of and cooperation between the municipality of Saerbeck and multiple societal stakeholders (citizens, associations, the planning office, local government, businesses and farmers,…). In 2011 the municipality of Saerbeck took over the approx. 90 hectare site of the former ammunition main depot in the area and developed the RE-park (BEP Saerbeck), generating enough electricity for 19,000 households today.

The example shows how different actors within the same municipality can work together in order to achieve a self-sufficient energy supply. It also showcases how energy education can be designed around practical installations for solar, wind and biogas.

Name	*Energie für Saerbeck eG*
Location	*Saerbeck / North Rhine-Westphalia*
Contact details	*Energie für Saerbeck eG* *Lindenstraße 2* *48369 Saerbeck* info@energie-fuer-saerbeck.de
webpage	*http://www.energie-fuer-saerbeck.de/index.php*
Members	*380*
Membership Structure	*private individuals* *companies/banks* *local authorities*
Total investments	*855,000€*
Sector	*energy production from PV* *energy production from wind* *energy production from biogas* *delivery of electricity* *consulting* *education*
Business model	*Feed-in tariff* *Direct selling*
Minimum participation	*1,000 €*

2.2.8 Energiegenossenschaft Odenwald eG

The **Energiegenossenschaft Odenwald eG** was created in 2009 out of cooperation between local actors, including the municipality and the local cooperative bank. The idea is to offer financial solutions for a self-sufficient regional energy supply powered by citizens. The cooperative started with a focus on solar power but quickly diversified to wind power and district heating options for local citizens, as well as maintaining a small station for e-cars. It commercializes electricity and natural gas products.

The example offers an interesting case on how a cooperation between the citizens, the local bank, local businesses and the community can ideally look like. It also shows how energy cooperative positively affect the value creation within a specific region.

Name	*Energiegenossenschaft Odenwald eG*
Location	*Erbach / Hessia*
Contact details	*Energiegenossenschaft Odenwald eG* *"Haus der Energie"* *Helmholtzstraße 1* *64711 Erbach* info@eg-odenwald.de
webpage	*https://eg-odenwald.de/*
Members	*3.000*
Membership Structure	*private individuals* *companies/banks* *local authorities*
Total investments	*50,000,000 €*
Sector	*energy production from PV* *delivery of electricity* *energy production from wind energy* *consulting* *energy production from other sources (hydro, CHP)* *e-mobility*
Business model	*Feed-in tariff* *Direct selling* Carsharing *Contracting*
Minimum participation	*100 €*

2.2.9 Fünfseenland eG

The energy cooperative **Fünfseenland eG** emerged in 2011 from the local Agenda 21[5] and the association for energy transition of the municipality of Starnberg. Today, even though the cooperative maintains its firm focus on solar power it also succesfully diversified its energy portfolio by implementing projects related to district heating networks and wind power. Next to its vast portfolio of electricity products the Fünfseenland eG also supplies the region with natural gas (wholesale activity).

[5]A local Agenda 21 is a municipality's long-term action program for future-proof local development.

The example shows how small efforts can slowly but surely become relevant for the region, diversifying from solar power to district heating and contracting models. The energy cooperative Fünfseenland eG also supports a strong relationship with education facilities, trying to contribute to more acceptance and awareness for renewable energies.

Name	*Energie-Genossenschaft Fünfseenland eG*
Location	*Herrsching / Bavaria*
Contact details	*Energie-Genossenschaft Fünfseenland eG* *Seestr. 35* *82211 Herrsching* info@eg-5-seen.de
webpage	*https://energiegenossenschaft-fünfseenland.de/*
Members	*470*
Membership Structure	*private individuals*
Total investments	*NA*
Sector	*energy production from PV* *district heating* *delivery of electricity and natural gas* *energy production from wind energy* *consulting*
Business model	*Feed-in tariff* *Tenant model* *Direct selling* *contracting*
Minimum participation	*200 €*

2.2.10 Haltern am See eG

The energy cooperative **Haltern am See eG** was founded in 2009 as a way for citizens of the region to actively participate in the energy market. Under the roof of the cooperative, key actors like local authorities, grid operators and financial institutions are joining forces with the citizens in an effort to strengthen the cooperative. Next to operating three PV-plants the cooperative also participates in wind power projects and collaborates with the municipality by financing the local biogas-plant.

The example shows how different actors within the same municipality can work together in order to achieve a self-sufficient energy supply. It shows how cooperatives can strengthen the regional value creation and highlights the positive repercussions for regional development matters.

Name	*Energiegenossenschaft Haltern am See eG*
Location	*Haltern am See / North Rhine-Westphalia*
Contact details	*Energiegenossenschaft Haltern am See eG* *Raiffeisenpl. 1* *45721 Haltern am See* info@energiegenossenschaft-haltern.de
webpage	*https://www.energiegenossenschaft-haltern.de/*
Members	*607*
Membership Structure	*private individuals* *companies/banks* *local authorities*
Total investments	*623,292 €*
Sector	*energy production from PV* *energy production from wind* *energy production from biogas* *delivery of electricity* *consulting*
Business model	*Feed-in tariff* *Direct selling*
Minimum participation	*250 €*

2.2.11 Heidelberger Energiegenossenschaft eG

The **Heidelberger Energiegenossenschaft eG** was created out of a student initiative, aiming to effectively counter the climate crisis by offering energy solutions based on PV systems. While mainly focusing on energy production from PV plants on municipality roofs (it started with an installation – you guessed right - on the university roof), the cooperative nowadays also maintains participations in different sectors, especially wind and energy development projects abroad. The cooperative also wants to explore more options in terms of e-mobility.

The example offers an interesting case on how the young(er) generation(s) are able to participate in the energy sector, by actively involving all kinds of local stakeholders. They can also show how to deal with administration (controlling etc.) and member services.

Name	*Heidelberger Energiegenossenschaft eG*
Location	*Heidelberg / Baden-Württemberg*
Contact details	*HEG Heidelberger Energiegenossenschaft eG* *Postfach 120353* *69066 Heidelberg* *info@heidelberger-energiegenossenschaft.de*
webpage	*https://www.heidelberger-energiegenossenschaft.de/*
Members	*600*
Membership Structure	*private individuals* *companies/banks*
Total investments	*2,900,000 €*
Sector	*energy production from PV* *delivery of electricity* *energy production from wind energy* *consulting* *e-mobility* *energy efficiency* *storage*
Business model	*Feed-in tariff* *Tenant model* *Direct selling* *Contracting*
Minimum participation	*100 €*

2.2.12 Solargenossenschaft Essen eG

The Ruhr Region is a hotspot of the coal and steel industry and is currently going through a structural transition. The **Solargenossenschaft Essen eG** is offering a green alternative for local citizens, focusing on a feed-in business model for solar power since its creation in 2009. It also currently develops business models for e-carsharing and energy efficiency by offering contracting solutions.

The example offers an interesting case on how a whole region that used to be heavily involved in fossil energy can slowly but surely contribute to RES. Some members used to work for mining companies, making the story even more authentic.

Name	*Solargenossenschaft Essen eG*
Location	*Essen/ North Rhine-Westphalia*
Contact details	*Solargenossenschaft Essen eG* *Ahornzweig 4* *45134 Essen* solargenossenschaft@web.de
webpage	*https://www.solargenossenschaft-essen.de/*
Members	*140*
Membership Structure	*private individuals*
Total investments	*NA*
Sector	*energy production from PV* *delivery of electricity* *consulting* *e-mobility* *service for electrical technology*
Business model	*Feed-in tariff* *Direct selling* *Contracting*
Minimum participation	*250 €*

2.2.13 Starkenburg eG

The energy cooperative **Starkenburg eG** was created in 2010 and has seen an impressive growth since then. Today, the cooperative is open to projects from all forms of RES, with a strong hold on wind and solar power projects. Other focal points are the operation of a biogas plant in a neighbouring municipality and new projects related to energy efficiency and energy saving. Other noteworthy areas include activities in the field of water power, e-mobility and energy development.

The example offers an interesting case on how citizen energy raises acceptance within a region / municipality through ownership. By operating the biogas plant, the cooperative took over the role of a key supplier, highlighting its importance for the region and for agricultural farmers in particular.

Name	*Energiegenossenschaft Starkenburg eG*
Location	*Heppenheim / Hessia*
Contact details	*Energiegenossenschaft Starkenburg eG* *Weiherhausstraße 8b* *64646 Heppenheim* *info@energiestark.de*
webpage	*https://www.energiestark.de/*
Members	*940*
Membership Structure	*private individuals*
Total investments	*19,500,000 €*
Sector	*energy production from PV* *delivery of electricity* *energy production from wind energy* *energy production from biogas* *e-mobility*
Business model	*Feed-in tariff* *Direct selling*
Minimum participation	*2.000 €*

2.2.14 WeilerWärme eG

In 2008 the **WeilerWärme eG** in Pfalzgrafenweiler in Baden-Württemberg was founded out of an environmental group of the Evangelical Church. Initially, the focus was on building a local heating network to use heat from a biomass wood-fired CHP. In the meantime, WeilerWärme also operates photovoltaic systems, supplies green electricity and has set up an electric car sharing system. Together with the municipality, it provides state of the art technology for the region it operates in by promoting regional development of other industries at the same time.

The example offers an interesting case on how citizens and local authorities can work together to supply households within a municipality with heat. The energy cooperative WeilerWärme eG also provides good

solutions on how to expand into different sectors, especially e-mobility, by mainly relying on local actors, thus boosting the regional value creation.

Name	*WeilerWärme eG*
Location	*Pfalzgrafenweiler / Baden-Württemberg*
Contact details	*WeilerWärme eG* *Im Lehnle 15* *72285 Pfalzgrafenweiler* info@weilerwaerme.de
webpage	*http://www.weilerwaerme.de/*
Members	*844*
Membership Structure	*private individuals* *local communities /authorities*
Total investments	*15.000.000 €*
Sector	*energy production from PV* *delivery of electricity* *district heating* *energy production from other sources (CHP)* *consulting* *e-mobility* *telecommunication*
Business model	*Feed-in tariff* *Direct selling* *Carsharing*
Minimum participation	*500 €*

2.2.15 Ökumenische Energiegenossenschaft eG

Founded as a collaboration between the catholic and the evangelic parishes of the municipality, the **Ökumenische Energiegenossenschaft eG** is dedicated to invest in regional energy production from RES. The energy production is centered around PV projects, mostly on roofs of common buildings within the municipality. Together with the international cooperative OIKOCREDIT they participate in international development projects by providing financial services to people who live in poverty.

The example offers an interesting case on how the dedication to climate protection brings together the catholic and the protestant church in one organisation.

Name	*Ökumenische Energiegenossenschaft eG*
Location	*Horb am Neckar / Baden-Württemberg*
Contact details	*Ökumenische Energiegenossenschaft eG* *Gutermannstraße 11* *72160 Horb am Neckar* oeeg-horb@t-online.de
webpage	*https://www.öeg-horb.de/*
Members	*148*
Membership Structure	*private individuals* *local communities /authorities*
Total investments	*1.000.000 €*
Sector	*energy production from PV* *delivery of electricity* *consulting* *climate protection*
Business model	*Feed-in tariff* *Direct selling*
Minimum participation	*500 €*

3. Conclusions

The reviewed data allows a comparison of energy cooperatives from Germany based on a specific set of variables, designed to analyze the role of local authorities in particular. A key take-away is that energy cooperatives positively contribute to social acceptance and regional value creation within a region. By involving relevant stakeholders, cooperatives contribute to greater transparency and thereby tap into the potential of local civil society. As for technology, the core business for German is and has always been PV and solar power, mainly due to low entry barriers like investment costs and technical requirements. However, many cooperatives show a clear drive towards a more diversified portfolio in terms of business models and primary energy sources respectively. This observation is correlated to the many modifications that were done to the German framework EEG, leaving energy cooperatives more often than not with no other choice but to adapt their business models.

4. References

For the elaboration of the underlying report, the following sources have been consulted:

- DGRV Survey 2019: Yearly survey for German energy cooperatives
- Homepages of presented energy cooperatives (links have been included in the respective part of the report)
- Interviews with representatives of energy cooperatives to add/update information